

CUBIT Capability Proposal

Technical Area

Geometry, Meshing, Infrastructure, GUI, Graphics, etc..

Technical Lead

Cubit Developer in charge of technical area

Mesh Smoothing	Mike Brewer
----------------	-------------

MRD Description

Describe the capability in terms of how a user would see it.

Ability to smooth mesh to match a given meshed surface. Currently, there is no easy way to ensure that a specific surface will have exactly the same nodal placements as another surface. If the user wants this, they have to either use mesh copying, with the morphsmoothtool enabled, or move the surfaces so that they are parallel and use the 'align mesh' command. This new command would enable the morph smoother to work independent of the mesh copying function.

SRS Description

What needs to be done by Cubit developers to implement this capability? Break the tasks into steps if applicable. (Steps should be on the order of 2 man-weeks or more)

- | |
|--|
| <ol style="list-style-type: none">1. Separate out the morph smooth tool functionality.2. Provide a method for determining the orientation of the target mesh.3. Implement command. |
|--|

Justification

Describe why this is important and what impact it will have if it is implemented. (or not implemented).

In situations where an exact copy of the mesh is needed, and where mesh copying isn't feasible, this would be very handy.

Resources

Who will work on this

Time estimate

How much time will it take in man-weeks

Targeted Release

10.2 (August 06), 10.3 (March 2007), 10.4 (August 2007), Future (beyond FY07)

Mike Brewer	2 weeks	10.2
-------------	---------	------

Submitted By:

Bob Kerr	3/28/2006
----------	-----------

Date: